



PTO/SB/08A (08-03)

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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

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Sheet 1 of 2

**Complete if Known**

Application Number	10/791,049
Filing Date	March 2, 2004
First Named Inventor	Xiaorong Wang
Art Unit	
Examiner Name	
Attorney Docket Number	P03002US1A

U. S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
OA		US- 4,773,521	09-27-1988	Chen	
OA		US- 4,829,135	05-09-1989	Gunesin et al.	
OA		US- 4,942,209	07-17-1990	Gunesin	
OA		US- 5,594,072	01-14-1997	Handlin Jr, et al.	
OA		US- 5,763,551	06-09-1998	Wunsch et al.	
OA		US- 5,847,054	12-08-1998	McKee et al.	
OA		US- 5,891,947	04-06-1999	Hall et al.	
OA		US- 5,905,116	05-18-1999	Wang et al.	
OA		US- 5,994,468	11-30-1999	Wang et al.	
OA		US- 6,191,217	02-20-2001	Wang et al.	
OA		US- 6,204,354	03-20-2001	Wang et al.	
OA		US- 6,255,372	07-03-2001	Lin et al.	
OA		US- 6,437,050	08-20-2002	Krom et al.	
OA		US- 2002/0045714 A1	04-18-2002	Tomalia et al.	
OA		US- 2003/0130401 A1	07-10-2003	Lin et al.	
		US-			
		US-			
		US-			
		US-			

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T <sup>4</sup>
		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				
OA		WO 02/081233 A1	10-17-2002	Bridgestone		
OA		WO 03/085040 A2	10-16-2003	Bridgestone		

Examiner Signature	/Olga Asinovsky/ (06/12/2006)	Date Considered	12/14/2006
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Substitute for form 1449/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(Use as many sheets as necessary)</i>				<b>Complete if Known</b>	
				Application Number	10/791,949
				Filing Date	March 2, 2004
				First Named Inventor	Xiaorong Wang
				Art Unit	
				Examiner Name	
Sheet	2	of	2	Attorney Docket Number	P03002US1A

[illegible]

<b>Examiner Signature</b>	/Olga Asinovsky/ (06/12/2006)	<b>Date Considered</b>	12/14/2006
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Sheet	1	of	1
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Application Number	10/791,049
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Sheet 1 of 2

PTO/SB/08A (07-05)

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Application Number	10/791,049
Filing Date	March 2, 2004
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Art Unit	1713
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Attorney Docket Number	P03002US1A

U. S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> of Group			
OA		US- 4,764,572	8/16/1988	Bean, Jr.	
OA		US- 4,871,814	10/3/1989	Gunesin et al.	
OA		US- 4,920,160	4/24/1990	Chip et al.	
OA		US- 5,036,138	7/30/1991	Stamhuis et al.	
OA		US- 5,130,377	7/14/1992	Trepka et al.	
OA		US- 5,227,419	7/13/1993	Moczygemba et al.	
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OA		US- 5,256,736	10/26/1993	Trepka et al.	
OA		US- 5,290,875	3/1/1994	Moczygemba et al.	
OA		US- 5,290,878	3/1/1994	Yamamoto et al.	
OA		US- 5,395,902	3/7/1995	Hall	
OA		US- 5,399,628	3/21/1995	Moczygemba et al.	
OA		US- 5,405,903	4/11/1995	Van Westrenen et al.	
OA		US- 5,436,298	7/25/1995	Moczygemba et al.	
OA		US- 5,438,103	8/1/1995	DePorter et al.	
OA		US- 5,462,994	10/31/1995	Lo et al.	
OA		US- 5,587,423	12/24/1996	Brandstetter et al.	
OA		US- 5,773,521	7/30/1998	Hoxmeier et al.	
OA		US- 5,955,537	9/21/1999	Steininger et al.	

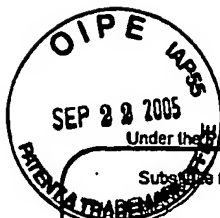
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		Country Code <sup>3</sup> *Number <sup>4</sup> *Kind Code <sup>5</sup> (if known)	MM-DD-YYYY			

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Sheet 2 of 2**Complete if Known**

Application Number	10/791,049
Filing Date	March 2, 2004
First Named Inventor	Wang
Art Unit	1713
Examiner Name	
Attorney Docket Number	P03002US1A

**U. S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
OA		US- 5,986,010	11/1/1999		
OA		US- 6,180,693	1/30/2001		
OA		US- 6,359,075	3/19/2002		
OA		US- 6,420,486	7/16/2002		
OA		US- 6,489,378	12/3/2002		
OA		US- 6,689,469	2/10/2004		
OA		US- 2003/0124353	7/3/2003		
OA		US- 2003/0149185	8/7/2003		
OA		US- 2003/0198810	10/23/2003		
OA		US- 2003/0225190	12/4/2003		
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**FOREIGN PATENT DOCUMENTS**

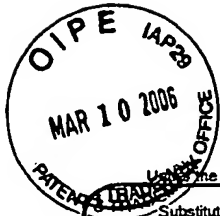
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T <sup>4</sup>
		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				
OA		EP 143500	6/5/1985	Damen		
OA		EP 265142	4/27/1988	Berzinis et al.		
OA		JP 01279943	1/10/1989	Tsubokura et al.		
OA		JP 05132605	5/28/1993	Hayashi et al.		

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Sheet 1 of 7

### U.S. PATENT DOCUMENTS

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		Number-Kind Code <sup>2</sup> (if known)			
OA		US- 3,972,963	8/3/1976	Schwab et al.	
OA		US- 4,233,409	11/11/1980	Bulkley	
OA		US- 4,247,434	1/27/1981	Vanderhoff et al.	
OA		US- 4,463,129	7/31/1984	Shinada et al.	
OA		US- 4,543,403	9/24/1985	Isayama et al.	
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OA		US- 4,788,254	11/29/1988	Kawakubo et al.	
OA		US- 4,829,130	5/9/1989	Licchelli et al.	
OA		US- 4,837,274	8/6/1989	Kawakubo et al.	
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OA		US- 4,870,144	9/26/1989	Noda et al.	
OA		US- 4,904,730	2/27/1990	Moore et al.	
OA		US- 4,904,732	2/27/1990	Iwahara et al.	
OA		US- 4,908,695	3/6/1990	Blizzard et al.	
OA		US- 5,075,377	12/24/1991	Kawakubo et al.	
OA		US- 5,120,379	6/9/1992	Noda et al.	
OA		US- 5,514,753	5/7/1996	Ozawa et al.	
OA		US- 5,169,914	12/8/1992	Kaszas et al.	
OA		US- 5,219,945	8/15/1993	Dicker et al.	

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OA		WO 01/87999A2	11/22/2000	Faust et al.		
OA		WO 02/100936	12/19/2002	Exxon Chem.		
OA		WO 02/31002A1	4/18/2002	UAB Res. Found.		
OA		WO 91/04992	4/18/1991	Exxon Chem.		

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OA		US- 5,247,021	9/21/1993	Fujisawa et al.	
OA		US- 5,262,502	11/18/1993	Fujisawa et al.	
OA		US- 5,290,873	3/1/1994	Noda et al.	
OA		US- 5,331,035	7/19/1994	Hall	
OA		US- 5,336,712	8/9/1994	Austgen, Jr. et al.	
OA		US- 5,421,866	8/6/1995	Stark-Kasley et al.	
OA		US- 5,447,990	9/5/1995	Noda et al.	
OA		US- 5,487,054	12/8/1998	McKee et al.	
OA		US- 5,525,639	6/11/1998	Keneko et al.	
OA		US- 5,527,870	6/18/1998	Maeda et al.	
OA		US- 5,580,925	12/3/1998	Iwahara et al.	
OA		US- 5,614,579	3/25/1997	Roggeman et al.	
OA		US- 5,627,252	5/6/1997	De La Croi Habimana	
OA		US- 5,688,856	11/18/1997	Austgen, Jr. et al.	
OA		US- 5,728,791	3/17/1998	Tamal et al.	
OA		US- 5,733,975	3/31/1998	Aoyama et al.	
OA		US- 5,739,267	4/14/1998	Fujisawa et al.	
OA		US- 5,777,037	7/7/1998	Yamanaka et al.	

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OA		WO2004/058874	7/15/2004	Bridgestone Corp.		
OA		EP 0 265 142 A2	4/27/1988	Rohm and Haas		
OA		EP 0 590 491 A2	4/6/1994	Bridgestone		
OA		EP 1 099 728 A1	5/16/2001	Chiba et al.		

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# **INFORMATION DISCLOSURE STATEMENT BY APPLICANT** (Use as many sheets as necessary)

Sheet 3 of 7

## **Complete if Known**

Application Number	10/791,049
Filing Date	March 2, 2004
First Named Inventor	Wang
Art Unit	1713
Examiner Name	
Attorney Docket Number	P03002US1A

U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)				
OA		US-	5,811,501	9/22/1998	Chiba et al.	
OA		US-	5,834,563	11/10/1998	Kimura et al.	
OA		US-	5,849,847	12/15/1998	Quirk	
OA		US-	5,855,972	1/5/1999	Kaeding	
OA		US-	5,883,173	3/16/1999	Elspace et al.	
OA		US-	6,011,116	1/4/2000	Aoyama et al.	
OA		US-	6,020,446	2/1/2000	Okamoto et al.	
OA		US-	6,025,416	2/15/2000	Proebster et al.	
OA		US-	6,025,445	2/15/2000	Chiba et al.	
OA		US-	6,060,559	5/9/2000	Feng et al.	
OA		US-	6,087,016	7/11/2000	Feeney et al.	
OA		US-	6,087,456	7/11/2000	Sakaguchi et al.	
OA		US-	6,106,953	8/22/2000	Zimmermann et al.	
OA		US-	6,117,932	9/12/2000	Hasegawa et al.	
OA		US-	6,121,379	9/19/2000	Yamanaka et al.	
OA		US-	6,147,151	11/14/2000	Fukumoto et al.	
OA		US-	6,268,451	7/31/2001	Faust et al.	
OA		US-	6,277,304	8/21/2001	Wei et al.	
OA		US-	6,348,546	2/19/2002	Hiro et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (if known)				
OA		EP 1 134 251 A1	9/19/2001	Okamoto et al.		
OA		JP 08-199062	8/6/1996	Mitsubishi Chem.		

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OA		US-	6,573,330	6/3/2003	Fujikake et al.	
OA		US-	6,588,645	7/29/2003	Larson	
OA		US-	6,649,702	11/18/2003	Rapoport et al.	
OA		US-	6,750,297	6/15/2004	Yeu et al.	
OA		US-	6,759,464	7/6/2004	Ajbani et al.	
OA		US-	6,835,781	12/28/2004	Kondou et al.	
OA		US-	6,872,785	3/29/2005	Wang et al.	
OA		US-	6,875,818	4/5/2005	Wang	
OA		US-	2002/0095008	7/18/2002	Heimrich et al.	
OA		US-	2002/0144401	10/10/2002	Noguerolas Vines et al.	
OA		US-	2003/0004250	1/2/2003	Ajbani et al.	
OA		US-	2003/0032710	2/13/2003	Larson	
OA		US-	2004/0059057	3/25/2004	Swisher et al.	
OA		US-	2004/0127803	7/1/2004	Lean et al.	
OA		US-	2004/0143064	7/22/2004	Wang	
OA		US-	2004/0198917	10/7/2004	Castner	
OA		US-	2005/0101743	5/12/2005	Stacy et al.	
OA		US-	2005/0203248	9/15/2005	Zheng et al.	
OA		US-	6,706,813	3/16/2004	Chiba et al.	

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12/14/2006

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(Use as many sheets as necessary)

Sheet	5	of	7
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Application Number	10/791,049
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Filing Date	March 2, 2004
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First Named Inventor	Wang
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Art Unit	1713
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**Examiner Name**

Attorney Docket Number	P03002US1A
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/Olga Asinovsky/ (06/12/2006)

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		First Named Inventor	Wang		
		Art Unit	1713		
		Examiner Name			
Sheet	6	of	7	Attorney Docket Number	P03002US1A

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
OA		Star Polymers by Immobilizing Functional Block Copolymers, by Koji Ishizu, Tokyo Institute of Technology, Meguro-ku, Tokyo, Japan, Star and Hyperbranched Polymers, 1999, ISBN 0-8247-1986-7	
OA		Formation of Worm-like Micelles from a Polystyrene-Polybutadiene-Polystyrene Block Copolymer in Ethyl Acetate, Canham et al., J.C.S. Faraday I, 1980, 76, 1857-1867	
OA		Anomalous Behaviour of Solutions of Styrene-Butadiene Block Copolymers in Some Solvents, Tuzar et al., Makromol. Chem. 178, 22743-2746 (1977)	
OA		Association of Block Copolymers in Selective Solvents, 1 Measurements on Hydrogenated Poly(styrene-isoprene) in Decane and in trans-Decalin, Mandema et al., Makromol. Chem. 180, 1521-1538 (1979)	
OA		Light-Scattering Studies of a Polystyrene-Poly(methyl methacrylate) Two-Block Copolymer in Mixed Solvents, Utiyama et al. Macromolecules Vol. 7, No. 4, July-August, 1974	
OA		Greenwood, N.N.; Eamshaw, A., Chemistry of the Elements, pp 1126-1127, Pergamon Press, New York 1984	
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OA		Rheology of Nanocomposites Based on Layered Silicates and Polyamide-12, B. Hoffman et al., Colloid Polm. Sci. 278:629-636 (2000)	
OA		Quaternary Ammonium Compounds, Encyclopedia of Chem Tech., 4th Ed. Vol. 20, 1996, Wiley & Sons, pp. 739-767	
OA		R.P. Quirk and S.C. Galvan, Macromolecules, 34, 1192-1197 (2001)	
OA		M. Moller, J.P. Spaz, A. Roescher, S. Mobmer, S.T. Selvan, H.A. Klok, Macromol. Symp. 117, 207-218 (1997)	
OA		T. Cosgrove, J.S. Phipps, R.M. Richardson, Macromolecules, 26, 4363-4367 (1993)	
OA		S. Mossmer, J.P. Spatz, M. Moller, T. Aberle, J. Schmidt, W. Burchard, Macromol. 33, 4791-4798 (2000)	
O.A.		Functionalized Core Shell Polymers Prepared by Microemulsion Polymerization, E. Mendizabal, J.E. Puga, A. Aguiar, S. Gonzalez-Villegas, 477/Antec '97/1733-1737	
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OA		Super-Repellent Composite Fluoropolymer Surfaces, S.R. Coulson, I. Woodward, J.P.S. Badyal, The Journal of Physical Chemistry B, Vol. 104, No. 37, Sept. 21, 2000, pp. 8836-8840, Dept. of Chemistry, Science Laboratories, Durham University, Durham, DH1 3LE, England, U.K.	
OA		Transformation of a Simple Plastic into a Superhydrophobic Surface, H. Yildirim Erbil et al., Science Vol. 299, Feb. 28, 2003, pp. 1377-1380	

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